Abstract

A device and a method for the production of nanotubes, fullerene and their derivatives are disclosed.

In an environment where an inert gas flow is present at a atmospheric pressure or at a lower pressure respect to atmospheric, a high frequency electromagnetic field is generated, then, a substantially pure or doped graphite element is subjected to this electromagnetic field at one end and it is heated until to vaporization and simultaneously formation and persistence of a plasma happen around and afterward the vaporization zone of the same graphite element.

This graphite element continues its advancement inside the electromagnetic field and the material that has been vaporized with the advancement is re-established; a second high frequency electromagnetic field afterward the first is present; this electromagnetic field generates another plasma.

So that a large amount of nanotubes, fullerene and their derivatives is simply produced with high yield.